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Before the FCC, Washington DC 20554

In the matter of the 1998 Biennial Review
Amendment of Part 97 of the Amateur Service Rules:
WT Docket 98-143 - RM-9148/9150/9196

## Introduction:

Having been an active amateur for almost 60 years; having helped pioneer narrow band FM, amateur radio Teletype, repeaters, 6m, single sideband, 10 GHz (where I've contacted seven states); having built my own equipment for over 20 years; having been active on moonbounce, amateur satellites, packet; having contacted over 350 countries; having operated from over 60 countries — some quite rare; having conducted a hearing before the FCC on the subject of repeaters which resulted in the largest change in the amateur rules to that date; having served on the FCC's National Industry Advisory Committee and the Long Range Planning Committee; having been an editor and publisher of amateur radio publications for the past 47 years, I've done just about everything there has been to do in the hobby.

## **Comments:**

1. Number of license classes: I recommend we have one only.

When I started in amateur radio most contacts were being made using CW, so it made sense that the entry license, Class B, required the ability to send and receive Morse Code at 13 wpm. One of the reasons for the hobby at that time was to provide the military with a body of trained radio operators in time of war. This proved of enormous value when WWII broke out. We had, at that time, about 50,000 licensed amateurs and 40,000 of them went into the armed forces.

No. of Copies rec'd \_\_\_\_\_\_ List A B C D E I was typical, joining the Navy in 1942 as a Radio Technician 3/c. I spent three months at Bliss Electrical School in Maryland and then six months at Radio Materiel School on Treasure Island, California, where I graduated as an Electronic Technician 2/c. I then volunteered for submarine duty and served aboard the USS Drum SS-228 from 1943-1945, making five war patrols and was promoted to ETM 1/c. I was in charge of all radio, radar and sonar equipment. We were one of the top ten scoring submarines and the Drum is now on display in Mobile, Alabama.

With the opening of more voice bands and the lowering of cost of voice transmitters, the use of CW has largely faded away. It is no longer used by the military or commercially, so I see no reason to continue to require more than a knowledge of the Morse Code to get a license. Those who enjoy using CW will continue to develop their skills, just as those who are now communicating via keyboards tend to develop their typing skills. Between computerized CW, packet, RTTY, and other computer-aided communications, there are far more amateurs today using keyboards than code keys.

Once we have eliminated the 13 and 20 wpm code tests, the difference between the license classes narrows to the memorization of the Q&A manuals in order to pass the license tests.

When I first got interested in amateur radio, building our equipment was a major element of the hobby. But the world of tubes changed to transistors and printed circuit boards, then to integrated circuits. The radio stores with tables full of cheap parts are long gone. Indeed, few electronic parts are even made in the US any longer. We no longer even have the factories to make the equipment needed to make the parts. Building radios today means the mere putting together of a kit of parts.

Our amateur radio equipment, which is mostly made in Japan, is so complicated that amateurs no longer are able to service it. We don't have the test equipment, nor any way to build the skills required.

Amateurs who get interested in packet soon familiarize themselves with the technology and develop their skills. Those interested in making DX contacts have to develop their operating skills to succeed. Indeed, in every facet of the hobby, when one gets interested in it one learns and builds skills. To me it makes no sense to test to see if someone has a skill in something they haven't done yet. Therefore, I propose that the amateur license system be simplified to one class of license. I see no further benefit to the hobby in the maintenance of six license

classes. That's a remnant of past days and is not consistent with today's technology and practice.

We should, I believe, open all of our bands to all amateurs and let their personal interest guide them in their development of technical and operating skills. Let's stop trying to force people to do things and encourage them to do build their skills because it's fun. The whip doesn't work for training animals or children, so let's stop using the code test whip to keep interested newcomers out of the hobby.

The ARRL originally proposed a 12.5 wpm code speed as a way to limit the number of newcomers. The Commission settled on 13 wpm and this requirement has indeed succeeded in limiting the number of amateurs.

Up until the ARRL's "Incentive Licensing" petition in 1963 the hobby had been growing at 11% per year steadily for the 17 years since WWII. That petition stopped all growth for several years and was instrumental in forcing 85% of the amateur radio stores out of business within two years, and over 90% of the manufacturers. It also resulted in the closing down of over 5,000 school radio clubs.

An ARRL study in 1960 showed that 80% of all new licensees were teenagers, with 50% being either 14 or 15 years old. These were the result of recruitment by the school radio clubs. Today the number of teenagers entering the hobby is around 12%. One result of this change is the loss of enthusiasm and pioneering which youngsters provided. Most of the new modes of communication pioneered by amateurs was done by young hams. I was 23 when I helped pioneer narrow band FM, and 27 when I got involved with ham radioteletype. Soon I was publishing a newsletter on the subject. I published the first book on this new digital communications medium, and that led me into a lifetime of publishing.

It was the development of amateur radio repeaters which made cellular telephones possible. I published a repeater magazine, a series of books, and organized repeater conferences to standardize protocols and channels.

Novice Licenses: Eliminate and grandfather present Novices to an Amateur Radio Operator's License.

RACES: Eliminate special RACES call signs.

Enforcement: A much simpler system for de-licensing people who are causing trouble should be implemented.

Telegraphy tests: The ability to receive Morse Code at 5 wpm should satisfy the current ITU requirements.

## Conclusion:

Let's keep it simple. Should a serious emergency occur, the more amateurs we have available, the more lives that might be saved. With an increasing number of predictions of major catastrophies by people with strong past prediction successes, it is only prudent to have redundant communications systems available.

If we have several million amateurs there will be both the pressure to develop communications systems which are more economical of bandwidth, the technicians and engineers to help develop these systems, and youngsters to help pioneer them.

If the US is going to be competitive in the 21st century we are going to need millions of the high-tech career oriented youngsters. Amateur radio is a wonderful way to recruit youngsters and aim them at these careers.

It was the introduction of amateur radio into the schools in Jordan on 1970 that made it possible for that country lead all of the other Arab countries in high-tech developments. It was my high school radio club that got me involved with amateur radio, a hobby that has provided me with a lifetime of fun, adventure, and business opportunites.

Regards .....

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